16 ANSWERS

=> fil reg

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STRUCTURE FILE UPDATES: 3 MAR 2008 HIGHEST RN 1006431-93-1 DICTIONARY FILE UPDATES: 3 MAR 2008 HIGHEST RN 1006431-93-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

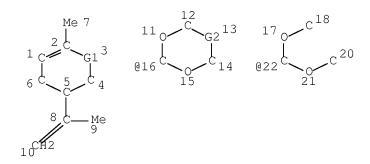
TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> d sta que 111 L9 STR



VAR G1=16/22 REP G2=(0-2) C NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE

L11 16 SEA FILE=REGISTRY SSS FUL L9

100.0% PROCESSED 33 ITERATIONS SEARCH TIME: 00.00.01

=> d ide can tot 114

L14 ANSWER 1 OF 11 REGISTRY COPYRIGHT 2008 ACS on STN

RN 1005242-49-8 REGISTRY

ED Entered STN: 24 Feb 2008

CN 1,5-Dioxaspiro[5.5]undec-7-ene, 2,3,3,7-tetramethyl-10-(1-methylethenyl)-(CA INDEX NAME)

MF C16 826 02

SR Other Sources

Database: ChemBank (The Broad Institute)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 ANSWER 2 OF 11 REGISTRY COPYRIGHT 2008 ACS on STN

RN 659719-50-3 REGISTRY

ED Entered STN: 08 Mar 2004

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 2-ethyl-6-methyl-9-(1-methylethenyl)-, (9R)-(CA INDEX NAME)

FS STEREOSEARCH

MF C14 822 02

SR CA

LC STN Files: CA, CAPLUS, CHEMCATS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:187015

L14 ANSWER 3 OF 11 REGISTRY COPYRIGHT 2008 ACS on STN

RN 659719-49-0 REGISTRY

ED Entered STN: 08 Mar 2004

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 2,6-dimethyl-9-(1-methylethenyl)-, (9R)-

3

(CA INDEX NAME)

FS STEREOSEARCH

MF C13 H20 O2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:187015

L14 ANSWER 4 OF 11 REGISTRY COPYRIGHT 2008 ACS on STN

RN 659719-48-9 REGISTRY

ED Entered STN: 08 Mar 2004

CN Cyclohexene, 6,6-diethoxy-1-methyl-4-(1-methylethenyl)-, (4R)- (CA INDEX

FS STEREOSEARCH

MF C14 824 02

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry. Rotation (-).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:187015

L14 ANSWER 5 OF 11 REGISTRY COPYRIGHT 2008 ACS on STN

RN 659719-47-8 REGISTRY

ED Entered STN: 08 Mar 2004

CN Cyclohexene, 6,6-dimethoxy-1-methyl-4-(1-methylethenyl)-, (4R)- (CA INDEX NAME)

FS STEREOSEARCH

4

MF C12 H20 O2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry. Rotation (-).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:187015

L14 ANSWER 6 OF 11 REGISTRY COPYRIGHT 2008 ACS on STN

RN 257630-48-1 REGISTRY

ED Entered STN: 01 Mar 2000

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 6-methyl-9-(1-methylethenyl)- (CA INDEX NAME)

MF C12 H18 O2

SR CA

LC STN Files: CA, CAPLUS, CASREACT

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 132:151712

L14 ANSWER 7 OF 11 REGISTRY COPYRIGHT 2008 ACS on STN

RN 183053-93-2 REGISTRY

ED Entered STN: 14 Nov 1996

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 6-methyl-9-(1-methylethenyl)-, (S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C12 H18 O2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

5

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 125:329056

L14 ANSWER 8 OF 11 REGISTRY COPYRIGHT 2008 ACS on STN

RN 124413-99-6 REGISTRY

ED Entered STN: 22 Dec 1989

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 6-methyl-9-(1-methylethenyl)-, (9R)- (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 6-methyl-9-(1-methylethenyl)-, (R)-

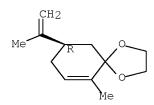
FS STEREOSEARCH

MF C12 H18 O2

SR CA

LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, USPATFULL (*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:187015

REFERENCE 2: 114:100665

REFERENCE 3: 112:35000

L14 ANSWER 9 OF 11 REGISTRY COPYRIGHT 2008 ACS on STN

RN 116562-27-7 REGISTRY

ED Entered STN: 25 Sep 1988

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 2,3,6-trimethyl-9-(1-methylethenyl)-,

 $[2R-[2\alpha, 3\beta, 5\alpha(S^*)]]-(9CI)$ (CA INDEX NAME)

C14 H22 O2 MF

SR CA

LC STN Files: CA, CAPLUS

$$\begin{array}{c} \text{CH}_2 \\ \text{Me-} \\ \text{C} \\ \\ \text{Me} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 109:211235

L14 ANSWER 10 OF 11 REGISTRY COPYRIGHT 2008 ACS on STN

116562-26-6 REGISTRY RN

ED Entered STN: 25 Sep 1988

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 2,3,6-trimethyl-9-(1-methylethenyl)-, $[2R-[2\alpha, 3\beta, 5\alpha(R^*)]]-(9CI)$ (CA INDEX NAME)

C14 H22 O2 MF

SR

LC STN Files: CA, CAPLUS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 109:211235

L14 ANSWER 11 OF 11 REGISTRY COPYRIGHT 2008 ACS on STN

33496-93-4 REGISTRY RN

Entered STN: 16 Nov 1984 ED

1,4-Dioxaspiro[4.5] dec-6-ene, 2,3,6-trimethyl-9-(1-methylethenyl)-, (9R)-CN (CA INDEX NAME)

OTHER CA INDEX NAMES:

1,4-Dioxaspiro[4.5]dec-6-ene, 2,3,6-trimethyl-9-(1-methylethenyl)-, (R)-

1,4-Dioxaspiro[4.5]dec-6-ene, 9-isopropenyl-2,3,6-trimethyl-, (-)- (8CI)

OTHER NAMES:

CN (-)-Carvone-2,3-butylene glycol acetal

FS STEREOSEARCH MF C14 H22 O2

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:187015

REFERENCE 2: 75:5091

=> fil uspatful

FILE 'USPATFULL' ENTERED AT 10:32:02 ON 04 MAR 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2007

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 4 Mar 2008 (20080304/PD)
FILE LAST UPDATED: 4 Mar 2008 (20080304/ED)
HIGHEST GRANTED PATENT NUMBER: US7340778
HIGHEST APPLICATION PUBLICATION NUMBER: US2008052798
CA INDEXING IS CURRENT THROUGH 4 Mar 2008 (20080304/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 4 Mar 2008 (20080304/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2007

=> d bib abs hitstr 120

L20 ANSWER 1 OF 1 USPATFULL on STN

AN 2005:280618 USPATFULL Full-text

TI Carvone acetals used as flavourings

IN Surburg, Horst, MEIERNBERG 9, HOLMINDEN, GERMANY, FEDERAL REPUBLIC OF 37603

Loges, Hubert, Hoxter, GERMANY, FEDERAL REPUBLIC OF

Machinek, Arnold, Holzminden, GERMANY, FEDERAL REPUBLIC OF

PI US 2005244561 A1 20051103

AI US 2003-521210 A1 20030802 (10)

WO 2003-EP8591 20030802

20050113 PCT 371 date

DT Utility

FS APPLICATION

LREP ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P., 1300 19TH STREET, N.W., SUITE 600, WASHINGTON,, DC, 20036, US

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 499

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to (-)-carvone acetals and their use as flavourings. In a preferred embodiment, the invention relates to the use of these acetals for the flavouring of oral hygiene products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 33496-93-4P, (-)-Carvone-2,3-butylene glycol acetal

124413-99-6P 659719-47-8P 659719-48-9P

659719-49-0P 659719-50-3P

(carvone acetals as aroma compds. for food and cosmetic and pharmaceutical use)

RN 33496-93-4 USPATFULL

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 2,3,6-trimethyl-9-(1-methylethenyl)-, (9R)-(CA INDEX NAME)

Absolute stereochemistry.

RN 124413-99-6 USPATFULL

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 6-methyl-9-(1-methylethenyl)-, (9R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 659719-47-8 USPATFULL

CN Cyclohexene, 6,6-dimethoxy-1-methyl-4-(1-methylethenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 659719-48-9 USPATFULL

CN Cyclohexene, 6,6-diethoxy-1-methyl-4-(1-methylethenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 659719-49-0 USPATFULL

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 2,6-dimethyl-9-(1-methylethenyl)-, (9R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 659719-50-3 USPATFULL

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 2-ethyl-6-methyl-9-(1-methylethenyl)-, (9R)-(CA INDEX NAME)

Absolute stereochemistry.

=> fil hcaplus

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FILE COVERS 1907 - 4 Mar 2008 VOL 148 ISS 10 FILE LAST UPDATED: 3 Mar 2008 (20080303/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d bib abs hitstr retable tot 119

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L19 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
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- AN 2004:138674 HCAPLUS Full-text
- DN 140:187015
- TI Carvone acetals as aroma compounds for food and cosmetic and pharmaceutical use
- IN Surburg, Horst; Loges, Hubert; Machinek, Arnold
- PA Symrise GmbH & Co. KG, Germany
- SO Ger. Offen., 7 pp.

CODEN: GWXXBX
DT Patent

LA German

FAN.CNT 1

T 11114 • 1	PA:	TENT	NO.			KINI		DATE								D.	ATE	
PI							DE 2002-10235968					20020806 <						
	WO	√O 2004015044				A1	. 20040219			WO 2003-EP8591						20030802 <		
		W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,
			PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ΤJ,	TM,	TN,
			TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW			
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
			FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
								CM,										
	· · · · ·			A1	20040225			AU 2003-251687					·	20030802 <				
								EP 2003-784158					20030802 <					
		R:						ES,										
					•			RO,			•							•
	US	2005	2445	61	·	A1	·	2005	1103	•	US 2	005-	5212	10	·	2	0050	113 <
PRAI	RAI DE 2002-10235968																	
-		2003																
OS MARPAT 140:187015																		
			•															

- AB The invention concerns (-)-carvone acetals and their use as aroma compds. In a preferential embodiment the invention concerns the use of these acetals for aromatization of oral hygiene products.
- IT 33496-93-4P, (-)-Carvone-2,3-butylene glycol acetal 124413-99-6P 659719-47-8P 659719-48-9P 659719-49-0P 659719-50-3P
 - RL: COS (Cosmetic use); FFD (Food or feed use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(carvone acetals as aroma compds. for food and cosmetic and pharmaceutical use)

RN 33496-93-4 HCAPLUS

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 2,3,6-trimethyl-9-(1-methylethenyl)-, (9R)-(CA INDEX NAME)

Absolute stereochemistry.

RN 124413-99-6 HCAPLUS

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 6-methyl-9-(1-methylethenyl)-, (9R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 659719-47-8 HCAPLUS

CN Cyclohexene, 6,6-dimethoxy-1-methyl-4-(1-methylethenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 659719-48-9 HCAPLUS

CN Cyclohexene, 6,6-diethoxy-1-methyl-4-(1-methylethenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 659719-49-0 HCAPLUS

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 2,6-dimethyl-9-(1-methylethenyl)-, (9R)-(CA INDEX NAME)

Absolute stereochemistry.

RN 659719-50-3 HCAPLUS

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 2-ethyl-6-methyl-9-(1-methylethenyl)-, (9R)- (CA INDEX NAME)

Absolute stereochemistry.

L19 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1999:805718 HCAPLUS Full-text

DN 132:151712

TI Cadmium iodide catalyzed and efficient synthesis of acetals under microwave irradiations

AU Laskar, Dhrubojyoti Dey; Prajapati, Dipak; Sandhu, Jagir S.

CS Regional Research Laboratory, Jorhat, 785 006, India

SO Chemistry Letters (1999), (12), 1283-1284 CODEN: CMLTAG; ISSN: 0366-7022

PB Chemical Society of Japan

DT Journal

LA English

OS CASREACT 132:151712

AB A new selective method of acetalization of aldehydes and ketones with 1,2-diols, 1,3-diols or alcs. mediated by Cd iodide under microwave irradiation is achieved in excellent yields.

IT 257630-48-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (cadmium iodide catalyzed synthesis of acetals under microwave irradiations)

RN 257630-48-1 HCAPLUS

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 6-methyl-9-(1-methylethenyl)- (CA INDEX NAME)

RETABLE

Referenced Author (RAU)		(RVL)	(RPG)	Referenced Work (RWK)	Referenced File
Baghurst, D	1992		1674	J Chem Soc, Chem Com	
Baruah, B	1996		351	Chem Lett	HCAPLUS
Baruah, B	1996	37	19087	Tetrahedron Lett	HCAPLUS
Baruah, B	1997	38	1449	Tetrahedron Lett	HCAPLUS
Bose, A	1991	56	6968	J Org Chem	HCAPLUS
Brown, J	1964	186	2183	J Am Chem Soc	HCAPLUS
Caddick, S	1995	51	10403	Tetrahedron	HCAPLUS
Chan, T	1983		203	Synthesis	HCAPLUS
Cramarossa, M	1997	53	15889	Tetrahedron	HCAPLUS
Daniele, M	1990		363	Main Group Met Chem	
Giguere, R	1989	1	103	Organic Synthesis: T	HCAPLUS
Hanzlik, R	1978	43	438	J Org Chem	HCAPLUS
Kim, S	1992	33	2565	Tetrahedron Lett	HCAPLUS
Kocienski, P	1994		156	Protecting Groups, 1	
Lillie, B	1994	35	1969	Tetrahedron Lett	HCAPLUS
Lorette, N	1960	25	521	J Org Chem	HCAPLUS
Lu, T	1995	160	2931	J Org Chem	HCAPLUS
Majdoub, M	1996	52	617	Tetrahedron	HCAPLUS
Minafuji, M	1989			JP 01-313481	HCAPLUS
Mingos, D	1991	20	1	Chem Soc Rev	HCAPLUS
Smith, A	1991	113	2071	J Am Chem Soc	HCAPLUS
Stenberg, V	1974	39	2815	J Org Chem	HCAPLUS
Thuy, V	1975	II	2558	Bull Soc Chim Fr	
Tsunoda, T		21	1357	Tetrahedron Lett	HCAPLUS
Weinelt, F	1997	1	1	EP 737734	HCAPLUS

- L19 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
- AN 1996:592479 HCAPLUS Full-text
- DN 125:329056
- TI Synthesis of physiologically active substances from several cyclic monoterpenvl ketones
- AU Nomura, Masato; Hisatomi, Satoshi; Fujhiara, Yoshihito; Shibata, Mitsunobu; Takagi, Shigeki; Sugiura, Masaaki
- CS Department of Industrial Chemistry, Kinki University, Higashihiroshima, 739-21, Japan
- SO Nihon Yukagakkaishi (1996), 45(9), 865-870 CODEN: NIYUFC; ISSN: 1341-8327
- PB Nihon Yukagaku Gakkai
- DT Journal
- LA Japanese
- AB Synthesis of ketals of (+)-menthone, (+)-carvone, (-)-verbenone, (+)-camphor and karahanaenone by condensation reaction with ethylene glycol, 1,2-ethanedithiol or 1,3-propanedithiol in the presence of zeolites or p-toluene sulfonic acid was developed. (+)-Menthone propylene dithioketal, 2-[2-(1-methylethyl)-5-methylphenylthio]ethanethiol, which was derived from (-)-verbenone, and (+)-camphor propylene dithioketal emitted odors indicating

their potential use as flavor ingredients. (+)-Camphor ethylene dithioketal at 550 ppm completely inhibited the growth of Propionibacterium acnes. Ethylene and propylene dithioketals of (+)-camphor showed efficient insecticidal activity of 83.apprx.100% at 0.5.apprx.1.0 g/m2 toward Tyrophagus putrescentiae and Dermatophgoides farinae with their activity toward T. putrescentiae exceeding that of N,N-diethyl-m-toluamide (DEET).

IT 183053-93-2P
RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of physiol. active ketals derived from several cyclic monoterpenyl ketones)

RN 183053-93-2 HCAPLUS

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 6-methyl-9-(1-methylethenyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L19 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1991:100665 HCAPLUS Full-text

DN 114:100665

TI Dimethy sulfoxide-catalyzed hydrolysis of acetals or ketals to carbonyl compounds

IN Honda, Toshio; Kusano, Takashi; Ishisone, Hiroyuki; Suzuki, Yukio; Mori, Wakako

PA Horiuchi Itaro Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	JP 02218636	A	19900831	JP 1989-39442	19890221 <		
PRAI	JP 1989-39442		19890221	<			

OS MARPAT 114:100665

AB R1R2CO (R1, R2 = H, alkyl, aryl; or R1R2 = alkylene) are prepared by thermal hydrolysis of R1CR2(OR3)OR4 (R1, R2 = defined above; R3, R4 = alkyl; or R3R4 = alkylene) in presence of H2O and at least a catalytic quantity of DMSO. The process allows to hydrolyze acetals and ketals, particularly hydroxycontaining acid sensitive ones, under neutral conditions and also selectively hydrolyze linear acetals in the presence of cyclic acetals. Thus, a solution of PhCMe(OMe)2 1, DMSO 5, and H2O 5 mmol in 4 mL dioxane was refluxed 1.5 h to give 93.3% PhCOMe.

IT 124413-99-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and hydrolysis of, DMSO catalyst for)

RN 124413-99-6 HCAPLUS

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 6-methyl-9-(1-methylethenyl)-, (9R)- (CA INDEX NAME)

Absolute stereochemistry.

L19 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1990:35000 HCAPLUS Full-text

DN 112:35000

TI Simple and chemoselective deprotection of acetals using aqueous dimethyl sulfoxide

AU Kametani, Tetsuji; Kondoh, Hirotsune; Honda, Toshio; Ishizone, Hiroyuki; Suzuki, Yukio; Mori, Wakako

CS Inst. Med. Chem., Hoshi Univ., Tokyo, 142, Japan

SO Chemistry Letters (1989), (5), 901-4 CODEN: CMLTAG; ISSN: 0366-7022

DT Journal

LA English

OS CASREACT 112:35000

GΙ



AB Deprotection of acetals was achieved in aqueous Me2SO under neutral reaction condition. Selective cleavage of acyclic acetals (e.g., I; R = Me3CSiMe2, tetrahydropyranyl) bearing various types of acid-labile protecting groups was also reported.

IT 124413-99-6

RL: RCT (Reactant); RACT (Reactant or reagent)
 (acetal cleavage of, with aqueous DMSO)

RN 124413-99-6 HCAPLUS

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 6-methyl-9-(1-methylethenyl)-, (9R)- (CA INDEX NAME)

Absolute stereochemistry.

- L19 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
- AN 1988:611235 HCAPLUS Full-text
- DN 109:211235
- TI Resolution of monoterpene enantiomers by gas chromatography
- AU Satterwhite, D. Michael; Croteau, Rodney B.
- CS Inst. Biol. Chem., Washington State Univ., Pullman, WA, 99164-6340, USA
- SO Journal of Chromatography (1987), 407, 243-52 CODEN: JOCRAM; ISSN: 0021-9673
- DT Journal
- LA English
- OS CASREACT 109:211235
- Enantiomeric monoterpenes were resolved by gas chromatog. on conventional capillary and packed columns following conversion to diastereomeric ketals of (2R,3R)-2,3-butanediol. Efficient methods are described for the derivatization and separation of sub-milligram quantities of the enantiomers of α -pinene, β -pinene, camphene, sabinene, α -thujene, limonene and 3-carene, as well as of structurally related alcs. and ketones.
- IT 116562-26-6P 116562-27-7P
 - RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and chromatog. separation of)
- RN 116562-26-6 HCAPLUS
- CN 1,4-Dioxaspiro[4.5]dec-6-ene, 2,3,6-trimethyl-9-(1-methylethenyl)-, $[2R-[2\alpha,3\beta,5\alpha(R^*)]]$ (9CI) (CA INDEX NAME)

- RN 116562-27-7 HCAPLUS
- CN 1,4-Dioxaspiro[4.5]dec-6-ene, 2,3,6-trimethyl-9-(1-methylethenyl)-, $[2R-[2\alpha,3\beta,5\alpha(S^*)]]$ (9CI) (CA INDEX NAME)

- L19 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
- AN 1971:405091 HCAPLUS Full-text
- DN 75:5091
- OREF 75:851a,854a
- TI Resolution of racemic ketones and aldehydes via diastereoisomeric acetals by gas-liquid chromatography. II. Diastereoisomeric ketals with 2,3-butanediol
- AU Sanz-Burata, Manuel; Irurre-Perez, Jose; Julia-Arechaga, Sebastian

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CS Spain
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SO Afinidad (1970), 27(281), 698-704 CODEN: AFINAE; ISSN: 0001-9704

DT Journal

LA Spanish

AB D-(-)-2,3-Butanediol was evaluated as a resolving agent via the formation of the diastereoisomeric ketals of the following (\pm) -ketones by gasliq. chromatog.: $(\pm)-3$ -methylcyclohexanone (I), $(\pm)-3,3,5$ - trimethylcyclohexanone (II), (-)-menthone (III), (-)-carvone, (+)-camphor (IV), $(\pm)-5$ -methyl-3-heptanone, and $(\pm)-2,6,8$ -trimethyl-4-nonanone. Only the resolution of I and II was successful. III and IV were effective resolving agents for $(\pm)-2,3$ -butanediol. The best sepns. were obtained on a capillary column coated with diethylene glycol polyadipate. In addition, steric factors responsible for good gas-liquid chromatog. sepns. were studied, with consideration of the empirical Rule of Six formulated by Newman and of the degree of immobility of the conformation.

IT 33496-93-4P

RN 33496-93-4 HCAPLUS

CN 1,4-Dioxaspiro[4.5]dec-6-ene, 2,3,6-trimethyl-9-(1-methylethenyl)-, (9R)-(CA INDEX NAME)

Absolute stereochemistry.

=> d his

(FILE 'HOME' ENTERED AT 09:52:42 ON 04 MAR 2008) SET COST OFF

FILE 'HCAPLUS' ENTERED AT 09:52:49 ON 04 MAR 2008

L1 1 S US20050244561/PN OR (US2005-521210# OR WO2003-EP8591)/AP,PRN E SURBURG/AU

L2 77 S E4, E6

E LOGES/AU

L3 12 S E3,E18

E MACHINEK/AU

L4 19 S E4

E SYMRISE/CO

L5 296 S E3-E23/CO, A, CS

E E15+ALL

L6 1087 S E2+RT OR E2-E27/PA,CS SEL RN L1

FILE 'REGISTRY' ENTERED AT 09:54:38 ON 04 MAR 2008

12 S E1-E12

L8 6 S L7 AND (C14H22O2 OR C13H20O2 OR C14H22O2 OR C12H18O2 OR C12H2

L9 STR

L7

L10 L11		1 S L9 16 S L9 FUL
		SAV L11 DEES521/A
L12		10 S L11 NOT L8
L13		5 S L12 AND (C12H18O2 OR C14H22O2 OR C16H26O2)
L14		11 S L8, L13
L15	FILE	'HCAPLUS' ENTERED AT 10:29:56 ON 04 MAR 2008 7 S L14
L16		1 S L15 AND L1-L6
L17		5 S L15 AND PY<=2003 NOT P/DT
L18		2 S L15 AND (PD<=20030802 OR PRD<=20030802 OR AD<=20030802) AND P
L19		7 S L16-L18
L20	FILE	'USPATFULL' ENTERED AT 10:31:31 ON 04 MAR 2008 1 S L14
	FILE	'REGISTRY' ENTERED AT 10:31:45 ON 04 MAR 2008
	FILE	'USPATFULL' ENTERED AT 10:32:02 ON 04 MAR 2008
	FILE	'HCAPLUS' ENTERED AT 10:32:18 ON 04 MAR 2008
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